

CLAIMS

What is claimed is:

1 1. A method of method for manufacturing finger rings, bracelets, earrings, and
2 other annular body jewelry from sintered, or cemented, composite materials comprising
3 at least one metal carbide and a metallic binder, comprises the steps of:
4 placing an annular blank of sintered material in a spinning fixture; and
5 abrading the annular blank against at least one curved abrasive surface so that
6 the annular blank acquires a curved surface about its circumference.

1 2. The method of claim 1, which further comprises the steps of:
2 providing an annular blank having at least one annular groove therein on an
3 outer surface thereof;
4 forcing a piece of precious metal wire into each groove, beginning at one end
5 thereof and continuing to the opposite end thereof so that both ends of the precious
6 metal wire adjoin one another; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 3. The method of claim 2, which further comprises the step of joining together the
2 ends of the precious metal wire.

1 4. The method of claim 2, which further comprises the step of burnishing the
2 precious metal in the groove.

1 5. The method of claim 2, wherein the precious metal wire is hammered into the
2 groove.

1 6. The method of claim 2, wherein the precious metal wire is rolled into the groove.

1 7. The method of claim 1, which further comprises the steps of:
2 providing an annular blank having at least one annular groove therein on an
3 outer surface thereof;
4 forming an endless hoop of precious metal wire for each annular groove;
5 pressing an endless hoop into each groove using a radial crimping/swaging
6 machine; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 8. The method of claim 7, which further comprises the steps of:
2 undercutting the walls of the groove with an abrasive tool prior to pressing an
3 endless hoop into an annular groove.

1 9. The method of claim 1, wherein the annular blank is subjected to a thin film
2 deposition process selected from the group consisting of physical vapor deposition,
3 chemical vapor deposition and plasma-assisted chemical vapor deposition, in which a
4 coating selected from the group consisting of titanium nitride and diamond like carbon is
5 applied thereto.

1 10. A method for manufacturing finger rings, bracelets, earrings, and other annular
2 body jewelry from sintered, or cemented, composite materials comprising at least one
3 metal carbide and a metallic binder, comprises the steps of:
4 providing an annular blank having at least one annular groove therein on an
5 outer surface thereof;
6 forcing a piece of precious metal wire into each annular groove; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 11. The method of claim 10, which further comprises the step of laser welding
2 together the ends of the precious metal wire.

1 12. The method of claim 10, which further comprises the step of burnishing the
2 precious metal in the annular groove.

3 13. The method of claim 10, wherein the precious metal wire is hammered into the
4 annular groove.

1 14. The method of claim 10, wherein the precious metal wire is rolled into the
2 annular groove.

1 15. The method of claim 10, wherein:
2 the precious metal wire is formed into an endless hoop for each annular groove;
3 and
4 an endless hoop is pressed into each annular groove using a radial
5 crimping/swaging machine.

1 16. The method of claim 10, which further comprises the steps of:
2 undercutting the walls of the groove with an abrasive tool prior to forcing a piece
3 of precious metal wire into each annular groove.

1 17. A method for manufacturing finger rings, bracelets, earrings, and other annular
2 body jewelry from sintered, or cemented, composite materials comprising at least one
3 metal carbide and a metallic binder, comprises the steps of:
4 providing an annular blank having an annular groove therein on an outer surface
5 thereof;
6 forming an endless hoop of precious metal;
7 pressing the endless hoop into the groove using a radial crimping/swaging
8 machine; and
9 removing excess precious metal to the level of the outer surface of the blank.

1 18. The method of claim 17, which further comprises the steps of undercutting the

2 walls of the groove with an abrasive tool while the blank is chucked in the spinning
3 fixture, and before the precious metal hoop is forced into the groove.

1 19. The method of claim 17, wherein the annular blank is subjected to a thin film
2 deposition process selected from the group consisting of physical vapor deposition,
3 chemical vapor deposition and plasma-assisted chemical vapor deposition, in which a
4 coating selected from the group consisting of titanium nitride and diamond like carbon is
5 applied thereto.

1 20. The method of claim 17, which further comprises the steps of:
2 securing the annular blank in a spinning fixture;
3 abrading the annular blank against at least one curved abrasive surface so that
4 the annular blank acquires a curved surface about its circumference.